

Mineral Industry Surveys

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MANGANESE IN OCTOBER 1999

In October, reported consumption of manganese ore containing 35% or more manganese, exclusive of that at iron and steel plants, was 38,000 metric tons, which was marginally greater than that for the previous month, according to the U.S. Geological Survey. This brought the revised year-to-date total to 375,000 tons. The figures for October increase to 42,200 tons and 417,000 tons when estimates for annual respondents are added on the basis of 1998 data. Corresponding industry stocks of ore at the end of the month were 176,000 tons, which includes an estimate for annual respondents on the basis of 1998 data. This was marginally less than the corresponding figure for stocks at the end of September. (Data for the most recent 13 months are plotted in the graph on page 2.)

Data for domestic consumption and stocks of manganese ferroalloys and metal for the April through June quarter of 1999 will appear in a subsequent monthly report.

Foreign trade data for October will appear in a subsequent report. For September, the data tabulated in this report indicated that overall trade volumes were comparatively low. The number of manganese units imported in the form of ore was the least since March 1994 (when no ore was imported) and in the form of ferromanganese the least since April 1983. The number of

manganese units exported in all forms was the least since December 1986 and in the form of metal the least since July 1993. **Note:** For early availability, the trade data appearing in this report are being placed on MINES FaxBack in preliminary form. The data for September were placed on FaxBack as of November 23. The FaxBack document number for the October trade data will be 420210.

The Defense Logistics Agency (DLA), U.S. Department of Defense, reported for October a cash disposal from the National Defense Stockpile of 2,268 tons of metallurgical-grade ore, all of which went to Sims Ag-Products, Inc., Mt. Gilead, OH.

The new Golden Dollar that the U.S. Mint will be putting into circulation in 2000 will have top and bottom layers of manganese bronze that will clad a central core of copper. The manganese content of the bronze will be 7% and that of the coin overall 3.5% (U.S. Mint, 1999).

Reference Cited

U.S. Mint, 1999, U.S. Mint announces alloy for new golden dollar coin: Washington, DC, U.S. Mint press release, October 5, 4 p.

TABLE 1 SELECTED U.S. FOREIGN TRADE IN MANGANESE 1/

(Metric tons, manganese content) 2/

	Impor	rts for consumption			Exports	
	Ore and	Ferroalloy			Ferroalloy	
	dioxide	and metal	Total	Ore	and metal	Total
1998: 3/						
September	20,100	42,500	62,700	237	1,810	2,040
January-September	142,000	401,000	543,000	2,380	16,100	18,500
1999:						
January	16,300 4/	48,300 4/	64,600	95	1,850	1,940
February	17,900 4/	40,700 4/	58,700	13	1,160	1,170
March	22,100 4/	40,100 4/	62,200	75	1,500	1,570
April	18,300 4/	39,800 4/	58,100	24	1,250	1,280
May	33,100 4/	23,900 4/	57,000	135	1,370	1,500
June	31,900 4/	47,800 4/	79,700	46	1,270	1,320
July	67,200 4/	29,700 4/	96,900	385	1,190	1,570
August	25,800 4/	43,700 4/	69,600	75	953	1,030
September	1,910	23,600 4/	25,500	96	720	816
Total	234,000	338,000	572,000	944	11,300	12,200

^{1/} Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

 ${\bf TABLE~2}$ U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN SEPTEMBER 1999 1/

(Metric tons)

				Year to date				
	Gross	Mn	Customs	Gross	Mn	Customs		
Source	weight	content	value	weight	content	value		
Australia	4,550	2,990	\$2,090,000	49,200	32,800	\$18,300,000		
Canada	37	24	10,000	37	24	\$10,000		
France				6,740	4,500	2,930,000		
Georgia				2,500	1,880	1,000,000		
India	770 2/	424 2/	493,000 2/	5,020	3,140	2,150,000		
Kazakhstan	3,190	2,210	1,230,000	16,800	11,400	6,470,000		
Mexico	5,600	3,690	2,360,000	44,700	29,300	19,000,000		
South Africa	8,200	5,460	3,070,000	61,700	41,500	23,900,000		
Spain				951	597	615,000		
Ukraine				8,190	6,030	2,850,000		
Venezuela	1,000	657	400,000	11,300	7,450	4,220,000		
Total	23,400	15,500	9,650,000	207,000	139,000	81,400,000		
Total, general imports	23,400	15,500	9,650,000	207,000	138,000	81,200,000		

^{1/} Data are rounded to three significant digits; may not add to totals shown.

^{2/} As reported except as estimated for imports of manganese dioxide and manganese waste and scrap and for exports from gross weights.

^{3/} Data may include revisions by the Bureau of the Census.

^{4/} All or part of these data have been referred to the Bureau of the Census for verification.

^{2/} All or part of these data have been referred to the Bureau of the Census for verification.

 ${\bf TABLE~3}$ U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN SEPTEMBER 1999 1/

(Metric tons)

					Year to date	
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value	weight	content	value
Low carbon:						
China	18	16	\$36,400	1,150	990	\$1,130,000
Italy	220	185	200,000	3,190	2,720	3,780,000
Japan				6,500	5,540	5,610,000
Mexico				1,220	977	1,110,000
Netherlands				43	45	31,700
Russia				21	6	17,700
Slovenia				9	7	5,220
South Africa	200	186	299,000	1,210	1090	1,780,000
Ukraine				60	57	64,800
United Kingdom				445	417	296,000
Total, low carbon	438	386	535,000	13,800	11,800	13,800,000
Total, general imports						
of low carbon	438	386	535,000	13,800	11,800	13,800,000
Medium carbon, 1%-2% C:						
France				2,720	2,220	1,510,000
Japan				424	361	511,000
Korea, Republic of				8,550	6,960	5,000,000
Mexico				20,500	16,500	11,800,000
Norway				20	9	18,600
South Africa	1,400	1,130	699,000	17,600	14,300	10,100,000
Total, m.c., 1%-2% C	1,400	1,130	699,000	49,900	40,300	29,000,000
Total, general imports						
of m.c., 1%-2% C	1,400	1,130	699,000	49,900	40,300	29,000,000
High carbon:						
Australia				5,390	4,100	2,330,000
Brazil				6,580	5,000	2,430,000
China				2,000	1,500	721,000
France				78,000	60,200	38,200,000
Saudi Arabia				1,270	994	463,000
South Africa	6,860	5,360	2,300,000	83,200	64,700	31,500,000
Total, high carbon	6,860	5,360	2,300,000	176,000	136,000	75,700,000
Total, general imports						
of high carbon	6,860	5,360	2,300,000	176,000	136,000	75,700,000
Grand total	8,700	6,880	3,530,000	240,000	189,000	118,000,000
Grand total, general imports	8,700	6,880	3,530,000	240,000	189,000	118,000,000

^{1/} Data are rounded to three significant digits; may not add to totals shown.

 ${\bf TABLE~4}$ U.S. IMPORTS 1/ OF MANGANESE ORE (20% OR MORE Mn) IN SEPTEMBER 1999 2/

(Metric tons)

	20% - 47%	Mn	47% or mo:	re Mn	Total	
Source	Gross	Mn	Gross	Mn	Gross	Mn
	weight	content	weight	content	weight	content
Mexico	140	62			140	62
Year to date:						
Australia			25,400	13,300	25,400	13,300
Belgium	138	55	7,260	6,680	7,400	6,740
Brazil			2	1	2	1
China			40	33	40	33
Gabon	37,900	12,400	190,000	88,300	228,000	101,000
Ghana	26,100	10,200			26,100	10,200
Mexico	17,200	6,560	1,090	523	18,300	7,090
Morocco			100,000	50,000	100,000	50,000
South Africa			58,000	29,200	58,000	29,200
Total	81,400	29,200	382,000	188,000	463,000	217,000

^{1/} Quantities for general imports and imports for consumption are identical.

Source: Bureau of the Census.

 ${\it TABLE~5} \\ {\it U.S.~IMPORTS~FOR~CONSUMPTION~OF~MANGANESE~DIOXIDE~AND~MANGANESE~METAL~IN~SEPTEMBER~1999~1/2} \\$

(Metric tons, gross weight)

		Manganes	se dioxide		Manganese metal				
			Year to date		Unwi	rought	Other		
		Customs		Customs					
Source	Quantity	value	Quantity	value	Quantity	Year to date	Quantity	Year to date	
Australia	1,880	\$2,630,000	14,900	\$20,900,000					
Belgium	115	181,000	482	755,000					
Canada								2	
China			7	10,200	374	1,750	40	496	
France			23	68,500				24	
Germany	17	88,500	59	318,000	18	202	(2/)	81	
Greece			16	21,500					
India								16	
Ireland	544	768,000	5,510	7,740,000					
Japan			16	21,400				4	
Mexico								20	
Netherlands							4	22	
South Africa	531	747,000	7,590	10,800,000	705	7,050			
Spain						36			
Ukraine					65	251			
United Kingdom			82	211,000		285		(2/)	
Total	3,080	4,420,000	28,700	40,800,000	1,160	9,570	44	665	
Total, general imports	3,070	4,390,000	28,700	40,800,000	1,160	9,850	44	665	

^{1/} Data are rounded to three significant digits; may not add to totals shown.

Note: Imports for consumption of metallic manganese waste and scrap totaled 4 tons, all of which was from Canada, to give a year-to-date total of 118 tons.

^{2/} Data are rounded to three significant digits; may not add to totals shown.

^{2/} Less than 1/2 unit.

TABLE 6 U.S. EXPORTS OF MANGANESE ORE (20% OR MORE Mn), FERROMANGANESE, SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN SEPTEMBER 1999 1/

(Metric tons, gross weight)

			Ferron	anganese,				
	Manganese ore		2% or less C		Silicomanganese		Manganese metal 2/	
	September	Year to date	September	Year to date	September	Year to date	September	Year to date
Australia					6	30		(3/)
Belgium								39
Brazil								124
Canada	- 191	876	168	2,570	203	2,220	112	1,090
Colombia				18				19
France		11				14		
Germany								1
Hong Kong							(3/)	1
India								1
Italy							23	33
Japan							18	551
Korea, Republic of		63						11
Mexico				24	27	212	5	68
Netherlands						19		190
Peru		54						
Singapore		747						
Spain						10		(3/)
Sweden								79
Taiwan								7
United Kingdom		136		9				500
Total	191	1,890	168	2,630	236	2,510	158	2,710

^{1/} Data are rounded to three significant digits; may not add to totals shown.

Note: Exports of ferromanganese with more than 2% carbon totaled 346 tons, of which 326 tons went to Canada and 20 tons went to Venezuela, to give a year-to-date total of 6,100 tons.

^{2/} Includes manganese-aluminum, some other alloys, and waste and scrap.

^{3/} Less than 1/2 unit.

TABLE 7 U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN SEPTEMBER 1999, BY CLASS 1/ $^{\prime}$

				Year to date			
			Principal sources and destinations:			Principal sources and destinations:	
	Gross weight	Value 2/	gross weight (metric tons);	Gross weight	Value 2/	gross weight (metric tons);	
Class	(metric tons)	(thousands)	value (thousands) 2/	(metric tons)	(thousands)	value (thousands) 2/	
Imports for consumption:							
Manganese oxides other than dioxide	327	\$163	Mexico 250; \$42	1,420	\$1,400	Mexico 720; \$138	
Sulfates, basket category,							
including manganese sulfate	3,320	1,930	Mexico 1,560; \$725	31,600	16,100	Mexico 14,800; \$7,400	
Potassium permanganate	175	344	Czech Republic 85; \$161	1,100	2,120	Czech Republic 543; \$1,020	
Manganites, manganates, and							
other permanganates				(3/)	3	United Kingdom (3/); \$3	
Exports:							
Manganese dioxide	310	184	Canada 273; \$123	9,130	6,770	United Kingdom 5,110; \$1,630	
Manganese oxides other than dioxide	876	711	Canada 520; \$188	3,760	3,320	Canada 2,520; \$994	
Sulfates, basket category,							
including manganese sulfate	996	445	Canada 866; \$258	15,400	6,840	Canada 13,100; \$3,870	
Potassium permanganate	92	177	United Kingdom 41; \$82	921	1,700	United Kingdom 277; \$565	
Manganites, manganates, and							
other permanganates	13	68	United Kingdom 5; \$32	211	1,000	United Kingdom 84; \$568	
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^{1/} Data are rounded to three significant digits.

^{2/} For imports, Customs value; for exports, f.a.s. value.

^{3/} Less than 1/2 unit.